SPOTLIGHT ON
MARYLAND

PAYING FOR PHYSICIAN CARE IN MARYLAND

What Are the Factors Contributing to Differences Across Specialties?

Established in 2007 through the passage of Maryland Senate Bill 107, the Task Force on Health Care Access and Reimbursement is examining a variety of issues related to health care access and provider reimbursement in the State of Maryland. As part of a series of broad and wide-ranging discussions on access to care, trends in physician supply by specialty and the Maryland region, and reimbursement for specific specialties, the Task Force is examining approaches to improving primary care through changes in the delivery of services and in physician compensation.

This spotlight explores differences in physician reimbursement across specialties, with a focus on how payment levels are related to the expected time and work involved in providing primary care and other services. The analysis relies on service-level relative value units (RVUs) and expected physician time from the Centers for Medicare & Medicaid Services (CMS), and average private insurer payments from the Maryland Medical Care Data Base (MCDB). While data in the MCDB do not measure service time or physician compensation directly, they can be used to look at service-level payments for different types of services and different physician specialties. A final section reviews alternative strategies for improving the relative compensation of primary care physicians.

HOW DOES COMPENSATION COMPARE ACROSS PHYSICIAN SPECIALTIES? The compensation of primary care physicians compared to that of other specialty physicians has been low, which may be a factor in the persistent challenges in recruiting and retaining primary care providers. Differences in compensation across physician specialties may arise from a number of sources, including the hours worked, the mix of services provided, and the payments per service. In Table 1, national survey data are presented on annual compensation, mean annual work RVUs, and mean work per hour for several specialties, from primary care to surgery and proceduralists. While these are national data, the patterns are likely to be similar to those we would see with data for Maryland. Annual compensation is about $190,000 for primary care specialties [including family practice, general internal medicine, and general pediatrics (all specialties not shown)], while that for other medical specialties and for surgical specialties is more than twice as much.

TABLE 1: Annual Compensation, Work RVUs, and Work per Hour for Selected Specialties, United States, 2006

	Mean Annual Compensation	Mean Annual Work RVUs	Mean Work per Hour
General Internal Medicine	$187,806	4,262	2.39
Family Practice*	189,490	4,460	2.51
Noninvasive Cardiology	380,096	7,787	4.28
Urology	402,676	7,175	4.02
Orthopedic Surgery	462,168	7,917	4.30
Invasive Cardiology	483,380	8,278	4.52

* Estimates for family practice exclude obstetrics/gynecology.

SOURCE: Medical Group Management Association (MGMA) Physician Compensation and Production Survey: 2007 Report, based on 2006 data; tabulations are provided by MGMA from survey database. Reprinted with permission from the Medical Group Management Association, 104 Inverness Terrace East, Englewood, Colorado 80112; 877.ASK.MGMA. www.mgma.com. Copyright 2007.

Not shown in Table 1 is the number of hours worked per year by specialty: there is little variation, with a range of about 1,800 to 1,900 hours. Thus, differences in hours worked are not responsible for the variation in compensation. Mean annual work RVUs—which are intended to represent the amount of work to provide a given service (embodying time, mental effort and judgment, technical skill and physician effort, and psychological stress)—vary substantially by specialty, showing a pattern similar to compensation. Primary care specialties log about 4,500 work RVUs per year, compared to upwards of 7,000 for other specialties. The

close relationship between annual compensation and work RVUs across specialties is evidence that the amount of work per service as measured under the Medicare fee schedule is driving variation in physician compensation. (For background on the Medicare fee schedule and how physicians are paid under Medicare, see the sidebar.)

HOW DO DIFFERENCES IN WORK, EXPECTED TIME, AND SERVICE MIX CONTRIBUTE TO DIFFERENCES IN REIMBURSEMENT ACROSS PHYSICIAN SPECIALTIES? This section uses data from the Maryland MCDB to examine service payment, RVUs, and expected time across the services provided by different physician specialties. The MCDB includes claims paid for provider services by private insurers in Maryland; thus, they represent the service mix and payment levels for the privately insured share of physicians' patients, which likely differ across physician specialty. Overall, private insurance payments account for about half of total provider payments.[1] Since the share of total physician payments accounted for by these private insurers differs by physician specialty and service mix, and payment levels may be quite different for other payers such as Medicare and Medicaid, it is impossible to use these data to estimate physician total and net revenue.

[1] According to the most recent National Health Expenditure Accounts, about $448 billion was paid for physician and clinical services in 2006, including about $220 billion from private insurers.

HOW ARE PHYSICIANS PAID UNDER MEDICARE? Differences in compensation across physician specialties may arise from a number of sources, many of which can be traced to the Medicare fee schedule. When Medicare implemented its physician fee schedule in 1992, the schedule was adopted by other payers and by the end of the decade was being widely used in establishing physician payment, both capitated and fee-for-service.*

Under the Medicare fee schedule, payments per service are based on the relative value scale. The relative value scale is a system establishing payment for different services provided by physicians based on the relative amounts of physician work, practice expense, and professional liability insurance costs involved in providing them. While there are no explicit time components to the relative value scale, there is an expected physician service time associated with each service.

Since payment (net of practice expense and professional liability insurance costs) is driven by relative work values, differences between relative work values and relative expected time per service result in different payments for physicians based on the mix of services they provide.

* For additional information, see J. Harris-Shapiro and M.S. Greenstein. "RBRVS—1999 Update," *Journal of Health Care Finance* (1999) Winter 26(2):48–52.

TABLE 2: Payment per RVU and per Expected Minute and Specialty Service Distribution, by Type of Service

	Evaluation and Management	Major Procedures	Imaging	Tests	Other Procedures	Other	All
PAYMENT*							
Mean Payment per Work RVU	$40	$47	$39	$51	$43	$31	$41
Mean Payment per Expected Minute	$1.32	$2.05	$1.61	$1.37	$1.49	$0.80	$1.43
DISTRIBUTION OF SERVICES**							
All Physicians	50%	<1%	14%	23%	10%	3%	100%
Primary Care	61	<1	2	26	3	8	100
Emergency Medicine	79	<1	3	10	8	<1	100
Radiology	<1	<1	96	<1	2	<1	100
Pathology	<1	<1	<1	99	<1	<1	100
Obstetrics/Gynecology	53	3	10	26	8	<1	100
Surgical Specialties	58	4	10	8	20	<1	100
Medical Subspecialties	46	<1	12	19	21	<1	100

* Payments are net of practice expense and professional liability insurance costs as determined by CMS relative values. Actual expense will vary for any particular practice depending on a practice's own experience.

** May not sum to 100 percent due to rounding.

SOURCE: Tabulations from the Maryland Medical Care Data Base for 2006. Anesthesiology has been excluded from the analysis due to differences in the payment methodology used for these physicians.

Underlying the differences in annual compensation by specialty discussed earlier are differences in the payment per service and differences in the types of services each specialty provides. The variation in payment per service is rooted in the way in which services vary along the dimensions of work and expected time.

Some services have a higher work component, while others may have a higher expected time; each of these factors has a somewhat different relationship to physician reimbursement. Mean payments by service category—measured with respect to both work and expected time—are shown in the top portion of Table 2. The mean payment per work RVU ranges from $39 for Imaging and $40 for Evaluation and Management (E&M) services, on the low end, to $47 for Major Procedures and $51 for Tests, at the higher end. After taking into account the expected time for each of the service types, mean payment per expected physician minute is lowest for E&M services and Tests at $1.32 and $1.37, respectively, and highest for Major Procedures at $2.05 and Imaging at $1.61.

How these differences in mean payment at the work and expected time level translate into physician compensation by specialty depends on the mix of services provided by different specialties. The distribution of services by service category for different physician specialties is shown in the lower portion of Table 2. Overall, E&M services account for about half of physician services. However, they account for more than 60 percent of services provided by primary care physicians and almost 80 percent of services provided by emergency medicine physicians, but virtually none of the services provided by radiologists and pathologists. Conversely, the highest-paying services—Major Procedures—account for a small share of services provided by obstetrician/gynecologists and surgeons but are not provided by primary care physicians. Overall, those services provided by primary care physician are concentrated among the types of services for which mean payment per expected minute is lowest—E&M, Tests, and Other Procedures.

Within the broad service categories, the actual mix of services varies across specialties. For example, the overall mean payment per expected minute for E&M services is $1.32 (see Table 2). This measure varies across specialties, however, with the mix of services provided by primary care physicians resulting in a mean of $1.24 per expected minute for E&M services provided by primary care physicians, compared with $1.55 per expected minute for E&M services provided by radiologists and $2.42 per expected minute for those provided by emergency medicine physicians (data not shown).

EXPECTED VERSUS ACTUAL TIME IN THE PROVISION OF PHYSICIAN SERVICES: IS THERE A GROWING GAP OVER TIME? As shown in Table 2, E&M services provided to Maryland's privately insured residents have the lowest payment per expected minute across major service categories. It is not clear, however, how closely the expected time requirement for each service used in the above analysis matches the *actual* time physicians currently spend providing that service. To the extent that there have been changes in productivity over the past several years, then the expected time measure may not be a very accurate measure of current clinical practice.

In fact, the values underlying the fee schedule—particularly the estimates of expected physician time to provide different services that affect the work RVUs—may not be updated frequently enough to track changes in technology. If there are changes in service technology that affect the actual time required to provide a service but are not reflected in changes in expected time, then payment to one specialty may be enhanced relative to another specialty. According to one analysis, the increase in productivity over a five-year period, measured as work relative value units per physician, was over three times higher among cardiologists and orthopedic surgeons than among family physicians and general practitioners.*

This potential discrepancy between expected time and clinical time actually required may be at the heart of specialty compensation differences. In particular, time is an explicit part of E&M coding guidelines, so expected time and actual time are likely to match fairly closely, but for most other services the code is based solely on the service provided, regardless of time required. As technology evolves to reduce this clinical time for some services, the payment per physician minute for these services will passively rise unless expected time and, therefore, work RVUs, are revised to reflect this evolution.

* C. Hogan. "Current Structure of Medicare Physician Reimbursement: A Long-Term Perspective," Presentation to Maryland Task Force on Health Care Access and Reimbursement, February 25, 2008.

TABLE 3: RVUs, Expected Provider Time, and Service Payment,* by Specialty

	Primary Care	Emergency Medicine	Radiology	Pathology	Obstretrics/ Gynecology	Surgical Specialties	Medical Subspecialties	All
Mean Work RVUs per Service	0.67	1.51	0.74	0.19	1.47	1.48	0.97	0.92
Mean Expected Physician Minutes per Service	21.3	35.2	16.6	6.2	38.4	42.3	28.6	27.0
Mean Payment per Work RVU	$39	$54	$39	$61	$42	$40	$42	$41
Mean Payment per Expected Physician Minute	$1.24	$2.33	$1.73	$1.80	$1.61	$1.40	$1.43	$1.43

* Payments are net of estimated practice expense and professional liability insurance cost as determined by CMS relative values. Actual expense will vary for any particular practice depending on a practice's own experience.

NOTE: Shading in yellow indicates the specialty is more than 5 percent below average for all physicians for that indicator, and shading in blue indicates that the specialty is more than 5 percent above the average for all physicians.

SOURCE: Tabulations from the Maryland Medical Care Data Base for 2006. Anesthesiology has been excluded from the analysis due to differences in the payment methodology used for these physicians.

Data presented in Table 3 show how these differences in average payment per work RVU and per expected minute for different types of services translate into service payment, RVUs, and expected provider time by specialty and, ultimately, into specialty-specific differences in compensation. For each measure, those specialties that are more than 5 percent less than the average for all physicians are indicated in yellow, and those more than 5 percent above the average for all physicians are shown in blue. Although the mean work RVUs and expected minutes per service for services provided by pathologists are low relative to other specialties, they receive a higher mean payment per work RVU than do primary care physicians and a higher mean payment per expected physician minute. Emergency medicine physicians and physicians with a surgical specialty have the highest mean work RVUs per service.

Of the several measures presented in Table 3, mean payment per expected physician minute is the one that drives annual compensation most directly, because both are based on some notion of dollars per unit of time. Despite their relatively modest values of payment and RVUs per service, radiology and pathology both end up receiving relatively high payment per minute. Only primary care is consistently below average across all measures, and it is the only specialty below average for the payment per time measure. This is consistent with the relatively low compensation of primary care physicians which is the subject of this "Spotlight on Maryland."

HOW CAN REIMBURSEMENT TO PRIMARY CARE PHYSICIANS BE IMPROVED? A range of strategies currently are being considered for maintaining or improving access to primary care services; these typically focus on improving payment for E&M services or reorganizing primary care practices. The options explored in this section are oriented toward the provision of physician services rather than the role played by nonphysician providers.

Approaches to Improving Payment E&M services play a larger role in primary care practices than in other practices. As a result, the relatively lower payment per expected minute for the services described above is an important driver of the relatively lower compensation of primary care physicians. There are two issues associated with payment for E&M services: the difference in work versus expected time as the basis for relative values (discussed above), and the role of E&M services in service mix across specialties.

Simple increases in E&M payments are unlikely to have the intended impact, as recent Medicare experience demonstrates.[2] Because E&M services are a large part of most physicians' service mix, the total compensation gap across specialties will close more slowly than E&M service payments will increase. For example, the MCDB data suggest that if payment for all E&M services increased by 20 percent among Maryland's private insurers, the mean payment per service provided by primary care physicians would increase about 16 percent, reflecting the large share of their services that would

[2] P.B. Ginsburg and R.A. Berenson. "Revising Medicare's Physician Fee Schedule—Much Activity, Little Change," *New England Journal of Medicine* (2007) 356:1201–1203.

benefit from the payment increase. At the same time, however, the mean service payment for medical subspecialties would increase 9 percent and that of surgical specialties would increase 8 percent. This would result in a mean payment per service for surgical specialties of more than twice that received by primary care physicians (data not shown).

Unlike the range of services offered by most other specialties, there are few, if any, services provided only by primary care physicians. So, as long as the present differences in service-level payments by service type exist, they will continue to have lower total compensation. One solution would be to develop E&M codes for primary care that qualitatively differ from the current office visit series for new and established patients that are used by all physicians. These ten codes (99201–99215) account for just under half of primary care physicians' services.

Reorganizing Primary Care An alternative to changing RVUs for E&M codes or introducing new primary care visit codes is to reorganize primary care practice. Two such reorganization strategies are the development of large multi-specialty practices and adoption of the medical home model.

Proponents of the development of large multispecialty practices suggest that these practices would provide a number of advantages for primary care physicians, including:

- Economies of scale and scope with shared fixed costs and access to specialists,
- Increased negotiating power with payers, and
- Increased appeal to newly trained physicians.

Others suggest that there is nothing preventing such models currently, so the fact that they have not developed extensively provides at least tentative evidence that these advantages have not been compelling to physicians.

The medical home model has received increasing attention from payers and physicians. "Medical home" refers broadly to a primary care practice that provides timely, coordinated care. There is not, however, consensus about a more precise definition of the medical home and how to pay for it. Some primary care advocates suggest that a bonus medical home payment should be tied to provision of evidence-based functions, including first contact, person-focused care over time, comprehensiveness, and coordination.[3] The National Committee on Quality Assurance has developed a medical home recognition tool that determines whether a practice meets the requirements of one of three designated medical home tiers. Several demonstrations are under way, and more, including some by Medicare, are expected in the next year. Several Medicaid programs have incorporated some form of a medical home model. Among the key issues that will shape each medical home implementation are the unit of payment (most currently based on a per-member-per-month payment), the patient population included (those with significant chronic disease burden versus the general population), and strategies for risk adjustment of payments. Depending on how these issues are resolved, the medical home model may offer an approach that begins to close the specialty compensation gap.

In addition, some primary care advocates endorse stronger efforts at the state and federal levels to promote primary care practice. Such policies would provide support for primary care training and practice; eliminate disparities in clinical earnings in primary care and secondary care; establish equitable distribution of providers; and support financial incentives for loan repayment and primary care training by medical schools and residency programs.[4] The Health Resources and Services Administration of the U.S. Department of Health and Human Services currently has responsibility for many of these functions. Severe budgetary constraints have limited the agency in establishing funding levels to attract physicians or influence medical graduates' specialty selections.

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[3] B. Starfield. "What Should States Do To Promote Primary Care?" Presentation to Maryland Task Force on Health Care Access and Reimbursement, June 10, 2008.

[4] Ibid.

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